

Utility Model Registration No. G 93 19 158.8 U1

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Job No.: 84-90179

Ref.: DE 9319158.8U1

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FEDERAL REPUBLIC OF GERMANY  
GERMAN PATENT OFFICE  
UTILITY MODEL REGISTRATION NO. G 93 19 158.8 U1

Main Class: B 05 B 15/12  
Secondary Class: B 05 B 15/04  
Filing Date: December 14, 1993  
Registration Date: March 3, 1994  
Publication in Patent Bulletin: April 14, 1994

COMPARTMENT FOR HOLDING A USER WHO IS ESSENTIALLY UPRIGHT

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The invention concerns a compartment with walls projecting from a base, a ceiling, and also a door, for holding a user who is essentially upright.

In public bathing areas, e.g., at beaches or in swimming pools, an excessively large number of individual sun-protection containers are used when solar radiation is at a high level. This results in great additional weight in so-called tourist planes due to passengers carrying along such containers. These conditions lead to a considerable extra strain, on the one hand, on the transport means, and also, on the other hand, on the environment, due to the containers made from plastic or a similar material, which are usually only partially used.

In recognition of so-called radiation chambers for light-therapy purposes according to DE-PS 437 776, the inventor has set the goal of presenting a remedy for the problem mentioned above.

The teaching of the independent claim leads to the solution of this problem, and the subordinate claims disclose favorable refinements.

According to the invention, on the inner surface of the walls of the compartment there are spray nozzles of liquid containers for skin-care agents, and these spray nozzles are connected to a

control element for the quantitative discharge of sunscreen or similar contents from the containers.

Thanks to these means, someone using the compartment, which is erected, e.g., in a beach area, can now enter the compartment and, after setting the control elements, spray sunscreen of different qualities and protection factors on his skin. In this way, single packages for individual use are made, for the most part, superfluous.

According to the invention, the walls can be produced from an inner shell and an outer wall forming a ring-shaped space holding the liquid containers. The outer wall should consist of, e.g., a corrosion-resistant aluminum sheet, and the inner walls should also be low maintenance. The latter can consist of, e.g., a translucent material.

In order to keep the head of the user free from the sprayed sunscreen agents, according to another feature of the invention, there should be at least one height-adjustable protection device for the head of the user mounted in the interior of the compartment in the region of the head, preferably a pot-shaped hood which is open at the bottom, which hangs from the ceiling of the compartment by means of an adjustable harness, and which can be pulled down by the user until it is at her shoulders. If it is made from a transparent material, the user can watch the spraying process.

Another form of the head protection consists in that, according to the invention, on the inner surface of the compartment there is an approximately horizontal collar plate, which can change in position, which has a neck opening that is open at one side, and which extends across the compartment cross section. By means of this configuration, a separate space for the head is created in the compartment, and this space remains free from spray mist.

According to another feature of the invention, the approximately horizontal collar plate can move up and down in parallel, thus it is height-adjustable.

The collar plate should preferably consist of a rigid cover part and also a segmented closing apron made of flexible material extending to the collar plate, wherein each of these two parts are shaped with part of the neck opening, which can be formed after they are put together. It has proven to be favorable to control the spray nozzles above the collar plate separately from the other nozzles by means of a controller activated by the collar plate.

According to the invention, there is an input device for data, e.g., in the form of a keyboard, which is connected to a computer as a control element. In this way, the user can select a certain container, or several, with a sunscreen agent that he prefers, and the input device can also keep unauthorized persons from using the compartment.

Furthermore, it has proven to be favorable to connect the computer to a weighing device and/or to sensors distributed throughout the compartment. In this way, it is possible to determine

the weight and/or the size of the user and to supply these values to a comparison logic unit, which calculates the quantity of sunscreen agent and sets the spray nozzles correspondingly.

Finally, it is possible to equip the control device with an additional identification device, which can be used, e.g., by means of a hotel chip carried by the user, for setting the controls and for reserving the use of the compartment.

The teaching according to the invention leads to a relatively wide range of variations of activation possibilities for the described compartment, which, as already mentioned, can make individual sunscreen containers and their resulting mountains of trash superfluous.

Further advantages, features, and characteristics of the invention result from the following description of preferred embodiments, as well as with reference to the drawing. Shown are:

Figures 1, 3: each a longitudinal section through the treatment compartment;

Figures 2, 4: the cross section through Figure 1 along line II-II and through Figure 3 along line IV-IV, respectively;

Figure 5: the cross section through a treatment tent.

In its simplest configuration, a compartment 10 for treating a user indicated by Q with sunscreen agents has on a base plate 12 cylindrical walls 14 of an outer diameter d of approximately 250 cm, concentric to the center axis A, made of wall elements, which are assembled on both sides of a non-projecting support frame preferably made from aluminum sheets. An interior shell 16 and an outer wall 18 define a ring-shaped space 17 that is sealed on both sides by a door 20 of the wall 14 by radial sheets 22 or similar cross elements.

In the ring-shaped space 17 there are several liquid containers 24, 26, which are mounted so that they can be replaced, and from which spray nozzles 28 project. These spray nozzles 28 extend through wall openings 29 of the inner shell 16 and project from this inner surface 15 into the interior 30 of the compartment.

In Figure 1, 32 represents a computer, which is loaded with the desires of the user Q relative to the conditioning of her skin by means of an input keyboard 34 on the outer surface 19 in the region of the door 20, if necessary with the use of a recognition chip, which is inserted through a slot. The user Q selects an acceptable assortment of sunscreen liquids, which are stored in the liquid containers 24, 26 with different qualities, protection factor, fragrance, brand name. The corresponding spray nozzle(s) 28 is/are controlled by computer 32.

The base plate 12 has a weighing section 36, which inputs the weight of the user Q to the computer 32. The computer activates control devices, which are not shown, of the selected spray nozzle(s) 28 and regulates them for the amount of liquid to be sprayed. Instead of this weight control, or in addition to it, a size measurement can also be performed through optional sensors 38 or similar detection units on the inner surface 15 of the compartment 10.

Corresponding to the computer variables that are input or that result from measurements, the skin of the user Q standing in the center of the compartment is sprayed.

For protecting the head, particularly in the area of the hair, in the selected embodiment, a height-adjustable hood 40 hangs down from the compartment ceiling 11 on an adjustable harness 42, which preferably consists of transparent material and which can be lowered until it is on the shoulders of the user. Not shown is a configuration of the compartment 10, e.g., with two hoods 40 for a user Q accompanying a child.

In the embodiment of a compartment 10a of Figures 3, 4, instead of a hood 40, there is a height-adjustable collar plate 46 with central neck opening 47 on sliding rails 44. One half of the plate is formed as a rigid cover segment 48 and the other as a radial, size-adjustable closing screen 50 made from a flexible material web, which is fixed to the cover segment 48 at a diametral rod 52, resulting in a semicircular cross-sectional half 47a. The latter is guided in lateral rails 54 and can be pulled to the edge 49 of the chord of the cover segment 48.

The user Q pulls this collar plate 46 according to Figure 3 upwards or downwards to the height of his neck and closes the two parts 48, 50 of the collar plate 46 against each other. In this way, pairs of connecting pins 56 that can move relative to each other on parts 48, 50 engage each other, closing a circuit that triggers the described spray process.

For this configuration, the spray nozzles 28h located above the collar plate 46 are not activated thanks to a special controller, so that the head part of the user Q remains in a spray-free space for the head. By means of the collar plate 46, the undesired increase of spray particles or the like can be more easily prevented than with the previously explained hood 40, which is open at the bottom.

In Figure 5, a tent space 60 surrounding the compartment 10, 10a is sketched. Here, the computer 32 and containers 24 are mounted in the hollow side walls 62 of the tent construction. In front of one side wall, there is a container 64 with a face-cream nozzle 66.

### Claims

1. Compartment with walls projecting from a base, a ceiling, and also a door, for holding a user who is essentially upright, characterized in that there are spray nozzles (28) of liquid containers (24, 26) on the inner surface (15) of the walls (14) for skin-care agents and these spray nozzles are connected to a control element for quantitative nozzle discharge.
2. Compartment according to Claim 1, characterized in that the liquid container(s) (24, 26) are mounted on the walls (14) so that it/they can be replaced.
3. Compartment according to Claim 1 or 2, characterized in that the walls (14) consist of an inner shell (16) and an outer wall (18) forming a ring-shaped space (17) holding the liquid container(s) (24, 26).

4. Compartment according to one of Claims 1-3, characterized in that an at least height-adjustable protective device for the head of the user (Q) is mounted in the interior (30) of the compartment in the area of the head.

5. Compartment according to Claim 4, characterized by a pot-shaped hood (40) that is open at the bottom as the protective device, whose position can be adjusted by means of an adjustable harness (42).

6. Compartment according to one of Claims 1-3, characterized in that on the inner surface (15) there is an approximately horizontal collar plate (46), which can change its position, which has a neck opening (48) that is open at the side, and which extends across the compartment cross section.

7. Compartment according to Claim 6, characterized in that the approximately horizontal collar plate (46) can be moved up and down in parallel.

8. Compartment according to Claim 6 or 7, characterized in that the collar plate (46) consists of a rigid cover part (48) and also a segmented closing apron (50) made from a flexible material extending to the collar plate, wherein each of the two parts forms a section of the neck opening (47).

9. Compartment according to Claim 8, characterized in that the closing apron (50) is guided in lateral rails (54) or the like.

10. Compartment according to one of Claims 6-9, characterized in that the spray nozzles (28h) above the collar plate (46) are deactivated by a controller activated by the collar plate.

11. Compartment according to one of Claims 1-10, characterized by an input device (24) for data, which is connected to a computer (32) as a control element.

12. Compartment according to one of Claims 1-11, characterized in that the computer (32) is connected to a weighing device (30) provided in the base region of the compartment (10).

13. Compartment according to at least one of Claims 1-12, characterized in that the computer (32) is connected to sensors (38) distributed on the inner surface (15) of the walls (14).

14. Compartment according to at least one of Claims 1-13, characterized in that the input device (34) and/or the computer (32) are/is connected to an identification device.

// insert figures 1-5 //

Figure 1

**Figure 2**



Figure 3

Figure 4

Figure 5

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